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Exploring the Antecedents & Consequences of Augmented Reality on Brand Experience – A Longitudinal Perspective

Audience and Motivation

- Augmented Reality (AR) has emerged as a unique and vivid way to interact with customers (Yim et al. 2017)
- It aims to link the real world with the virtual world – blending the use of technology into real life (Rauschnabel et al. 2017)
- While in its infancy, spending on the technology is expected to reach \$60 billion by 2020 (Porter and Heppelmann, 2017)
- Sephora, L'Oreal, Nike, Addidas, Mini, Topshop, American Apparel, IKEA, Amazon have all recently implemented AR technology
- The advancement of new technologies such as 5G will enhance marketers' ability to utilize AR and further stimulate investment in this burgeoning technology (Newman, 2018)
- ***However, real questions over the value of AR remain unanswered. More research is needed to add to our collective knowledge and to support marketing practitioners.***

Research questions

1. What value does an AR brand experience add to the brand?

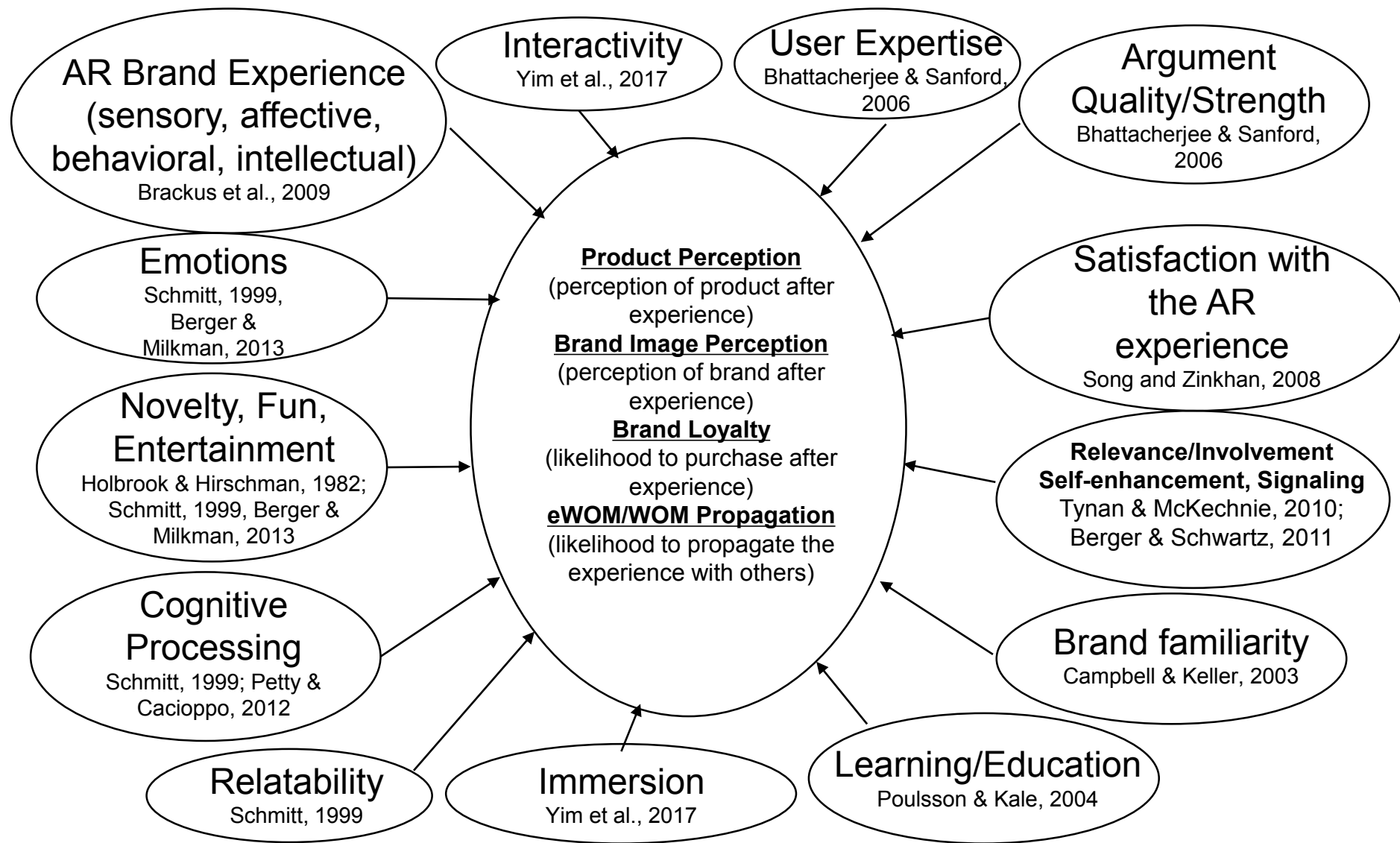
2. What factors of an AR brand experience influence the following brand outcomes?

- Product (perception of product after experience)
- Brand image (perception of brand after experience)
- Brand loyalty/intent to purchase (likelihood to purchase after experience)
- eWOM/WOM propagation (propensity to share details of the experience with others)/community (interaction with others)

3. What impact does the passage of time have on the value of an AR brand experience?

Relevant Theory

- Brackus et al. (2009) outline the following types of experiences:
 - **Product** – occurs when consumers *interact* with products (searching for them or evaluating them). Can be direct (interaction) or indirect (presented virtually or in an advertisement). The product experience is the experience of the product itself – evaluative in nature.
 - **Shopping/service** – occurs when a consumer experiences a store's physical environment, its personnel, policies and practices
 - **Consumption** – when consumers consume and use a product
 - **Brand experience** – occurs when consumers are exposed to brand-related stimuli in which the brand is marketed or sold
- This research builds on the work of Brackus et al. (2009) by exploring AR as a brand experience, the value that AR adds to the brand, and the factors of an AR brand experience that influence brand outcomes.
- Drawing on Javornick's (2016) AR research agenda, we develop our conceptual model based on the literature regarding the factors that influence brand, experiential and augmented reality outcomes and examine four DVs (conceptual model on the next slide).
- To enhance our findings, we are also examining the impact of the passage of time after exposure to an AR brand experience based on time decay theory (Thorndike, 1914) on five key areas: brand recall, brand recognition, brand image, brand loyalty and product value perception.



Method

– A Longitudinal Experimental Approach

- Utilizing a commercially available AR brand experience, an online, between-subjects pre-test/post-test experiment is being conducted using an access panel.
- Two short films were developed showing respondents the shopping experience they would have with or without the AR brand experience*.
- One group are assigned to the AR brand experience and one group assigned to the control group (no AR brand experience). A pre-test questionnaire is administered to measure areas of focus before exposure to the experience (e.g. brand awareness, involvement, familiarity). Following exposure to the experience, respondents are asked to complete a series of questions to measure the variables in our conceptual model.
- Quantitative analysis in the form of covariance-based structural equation modelling is used to analyze the variables and their influence on product perception, brand image perception, brand loyalty and WOM/eWOM propagation. Paired-samples t-tests are used to examine the added value of the AR experience on brand image, brand loyalty, and product value perception.
- A follow-up study is conducted with each group to complete a second questionnaire two weeks after initial contact to examine the factor of time and its impact on brand image, brand recall, brand recognition, loyalty, and product value perception.
- **see slide 8 for our short films shown in the experiment.*

Method – Sample

Judgement sampling: college-educated, male and female wine drinkers aged 18+ in the UK

Data Capture	Number of respondents
AR 1 Pilot	20
AR 1 Pilot Follow-up	20
AR 2 Pilot (control group)	20
AR 2 Pilot Follow-Up (control group)	20
AR 1	250
AR 1 Follow up	*Anticipated: 125
AR 2 (control group)	250
AR 2 Follow up (control group)	*Anticipated: 125

*The access panel outlines a usual follow up response rate of around 50%, we have predicted the above numbers based on this.

Method - Experiment Short Films

- AR Experience



<https://www.youtube.com/watch?v=K90Kor1mtUQ&feature=youtu.be>

- Control



https://www.youtube.com/watch?v=CwGo_De7ccw&feature=youtu.be

Results

- At this stage, we have successfully conducted a pilot study with 40 participants
- We are now capturing data for the primary study (circa 500 participants) with an anticipated re-contact rate of 50% for the follow-up study to measure the impact of the passage of time
- Anticipated completion of data capture is March 2019 with full results ready for the TPM conference in May, 2019

Linking Theory to Practice - Implications

- Due to technological advances and the future capabilities brought about by 5G, investment in augmented reality is projected to reach \$60 billion by 2020 (Porter and Heppelmann, 2017).
- Although investment in AR is set to increase, there is a limited amount of research on *AR brand experiences*.
- This study aims to support marketing practitioners by examining the value added to the brand as a result of exposure to an AR brand experience. Additionally, the factors of an AR brand experience that influence brand outcomes are explored (*brand image, brand loyalty, product perception and WOM/eWOM propagation*).
- Further, this study explores the impact of the passage of time on five key outcomes in the weeks following exposure to an AR brand experience: *brand recall, brand recognition, brand loyalty, brand image and product perception*.
- It is anticipated that the findings from this study will support marketing practitioners with the provision of knowledge needed to optimally design AR experiences in order to receive a greater return on their investment.

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